

Notice of Determination
NPDES Permit to Operate a Concentrated Animal Feeding Operation
Nelson Creek Farms
Paris, Henry County, Tennessee
NPDES Permit Number TN0074926

October 25, 2004

I. Background

The Division of Water Pollution Control (division) received an application for an NPDES permit from Nelson Creek Farms located in Paris, Tennessee, on July 31, 2003 for the operation of a concentrated animal feeding operation (CAFO). On February 23, 2004, the division gave public notice of the proposed individual NPDES permit and scheduled a public hearing on April 5, 2004. The hearing was held in the Juvenile Court Room of the Paris County Court House. The comment period closed on April 19, 2004.

II. Report of Hearing

The applicant, a representative of the swine industry and staff from the Environmental Assistance Center – Jackson and the staff from the Nashville Central Office of the division were in attendance at the hearing. No oral comments were made.

III. Comments and Responses to Comments

The Tennessee Chapter Chickasaw Group of the Sierra Club submitted written comments on April 11, 2004. The division's responses to these comments are provided below.

Comment: The time of the public hearings should be held at a time conducive for the public to participate.

Response The division gave public notice on February 23, 2004, which stated the location, date and time of the public hearing. There were no other responses or objections to the public notice and the public hearing. Therefore, the division believes that the time selected was conducive for the permittees, interested parties and the general public.

Comment: TDEC must create a TMDL for Holly Fork Creek and Nelson Creek in Henry County prior to approving the renewal of the Nelson Creek Farms permit.

Response: Nelson Creek Farms is an existing source. An existing source in accordance with CFR 40 § 122.29(a)(3) means any source, which is not a new source or a new discharger. In accordance with the permit discharges of pollutants of wastewaters from the CAFO to waters of the state is prohibited. The permit is written in an effort to control water pollution and to prevent degradation to the waters of the state by prohibiting wastewater discharge to waters of the state from the CAFO.

Water body segment ID number TN06040005024_1000 (Holly Fork Creek) is located in Henry County up stream of Nelson Creek and intercepts over 2 miles down stream of the CAFO. This segment of Holly Fork Creek is impaired due to pollutant or pollutants exceeding water quality standards for the following parameters: Organic Enrichment/Low DO, Pathogens, Other Habitat Alterations.

A total maximum daily load (TMDL) is currently being developed for Holly Fork Creek. A TMDL is not being developed for Nelson Creek. A TMDL is developed for water bodies that are impaired and do not meet their classified uses. Therefore, TMDLs are developed only for streams or any segments of the stream or lake identified as impaired. Nelson Creek is not identified as an impaired stream.

Comment: All references to “navigable waters” in the rationale should be changed to “waters of the state”.

Response: References to “navigable waters” will be replaced with “waters of the state”.

Comment: Copies of all relevant documents should be available to the public at the hearing location.

Response: The division provides copies of the application, draft permit and permit rationale at the public hearing, the local Environmental Assistance Centers (EACs) and at the Nashville Central Office. Copies of these documents can also be obtained by mail and or by email, upon request.

Comment: The company or integrator must be a co-permitted and face the same liabilities along with the CAFO owner or operator.

Response: The National Pollutant Discharge Elimination System (NPDES) regulations define the owner/operator, in 40 CFR122.2, as the owner/operator of the facility or activity. The permit is issued to the owner/operator on the application. Unless the integrator is a co-owner/operator, there is no regulatory basis for making the integrator a joint permit holder.

Comment: Comments pertaining to land application of manure, litter and process wastewater:

- a. Land application of process wastewater or manure and tile drains are, in fact, a discharge to waters of the state by a point source and must be permitted;
- b. The permit must prohibit the application of waste prior to or during precipitation events including rain, snow or frozen ground; or onto saturated soils or in an amount that result in puddling;
- c. The permit must contain an enforceable requirement that nutrients are applied at an agronomic rate and;
- d. The permit needs 3rd party requirements for land application of process wastewater or manure.

Response:

- a. Land application areas and tile drains are specifically excluded from the federal definition of point source in 40 CFR 122.3. Land application and tile drains do not require separate permitting unless process wastewater, litter or manure are applied in excess of the Comprehensive Nutrient Management Plan (CNMP) requirement or create a point source discharge.

The CNMP must be consistent with the Natural Resources Conservation Service (NRCS) *Field Office Technical Guide* and the NRCS *Agriculture Waste Management Field Handbook*. Land application of manure in accordance with the CNMP should preclude any direct discharges of manure into the waters of the state. Furthermore, the permittee is required to adhere to provisions of the nutrient management plan so as to prevent over-application of nutrients to the receiving fields. By doing so, the permittee should prevent the introduction of nutrients to waters.

- b. The NRCS guidelines in chapter 11 of the Agricultural Waste Management Field Handbook lists when to apply and not apply organic waste to land including on windy days, when the ground is frozen or snow covered or when the soil is saturated. The CNMP, which must be consistent with the NRCS guidelines, establishes when the land application of manure or process wastewater may take place.
- c. The CNMP, which is part of the application package, must be approved by Tennessee Department of Agriculture (TDA), and must be consistent with NRCS guidelines. Adherence to the requirements, conditions and guidelines in the site-specific CNMP is enforceable through the permit.
- d. Regulating the activities of the 3rd party is beyond the scope of this permit for CAFO operations. However, any 3rd party, who receives 100 tons or more of manure or process wastewater, must indicate by signature on the *Agreement for the Removal of Litter, Manure and/or Process Waste from a APO* that the 3rd party understands the best management practices required to prevent runoff to surface waters.

Comment: Comments concerning the comprehensive nutrient management plant (CNMP) were:

- a. The CNMP should be approved by the permitting authority;
- b. That the CNMP become an enforceable part of the permit and;
- c. The CNMP must be available to the public.

Response

- a. An owner/operator must submit a completed Notice of Intent (NOI) along with a copy of a CNMP to TDA. The CNMP must be consistent with the current Natural Resources Conservation Services (NRCS) *Field Office*

Technical Guide and the NRCS *Agriculture Waste Management Field Handbook*.

Once the CNMP has been reviewed and approved (i.e. meeting the NRCS standards) by TDA (regulating authority), the complete package is forwarded to the division (permitting authority). The division will review the permit application and, if complete, proceed with the permitting process.

- b. Compliance with the operational aspects of the CNMP is an integral and enforceable part of the permit.
- c. The permit application including the CNMP, the closure plan and related permit documents are available for public review at TDEC's Nashville office or at the TDA's Ellington Agriculture Center Rd. in TN.

Comment: The permit failed to contain any enforceable operational requirements.

Response: The permit states that the CAFO *is not authorized to discharge to the waters of the state* except when either a chronic or catastrophic rainfall events cause an overflow of process wastewater from a facility properly designed, constructed, maintained, and operated to contain:

- a. All process wastewater resulting from the operation of the CAFO (such as wash water, parlor water, watering system overflow, etc.); plus,
- b. All runoff from a 25-year, 24-hour rainfall event for the CAFO.

Comment: The permit needs additional monitoring, including up-gradient and down-gradient monitoring wells near the retention facility, upstream and downstream of the receiving stream listed on the permit, the stormwater runoff from the permitted facility as well as all fields receiving manure or process waste via 3rd parties from the permitted facility.

Response: Sampling is required in the event of a discharge. Additional sampling is at the discretion of the division to investigate an abnormal condition in the receiving stream. Groundwater monitoring up gradient and down gradient of retention systems, at this time, would be voluntary. The monitoring of a non-permitted 3rd party is outside the division authority.

Comment: Copper, zinc, *E coli* and fecal coliform should be included as additional parameters to monitor.

Response: A foot washing bath, containing zinc and copper compounds, is part of dairy operation. However, neither foot washing nor these compounds are used in swine operations. Therefore, zinc and copper are not included as parameters to be

monitored. *E coli* will be added to the list of pollutants to be monitored, in the event of a discharge.

Comment: The permit fails to require measures to control the phosphorus discharge from the CAFO.

Response: The CNMP, which is an enforceable part of the permit, addresses the land application and the control of the nutrients, including phosphorus.

Comment: TDEC's definition of a 25-year, 24-hour rain event including both chronic and catastrophic storm events is inconsistent with the Clean Water Act.

Response: The catastrophic and chronic events definitions were retained from the previous general CAFO permit and from EPA's definitions.

A "catastrophic event" is a rainfall event equal to or greater than the 25-year, 24-hour storm, or the occurrence of a tornado or other severe event as determined by the division that would cause an overflow from the waste retention structure.

A "chronic event" is a series of wet weather conditions that causes an overflow of process wastewater from a facility designed, constructed and operated to contain the entire process generated waste 24-hour rainfall event for the location of the point source.

Comment: TDEC personnel should conduct at least one unannounced inspection with sampling per year. Industrial animal production sites need some form of checks and balances, and sampling by the regulators would provide a measure of additional control and monitoring verification.

Response: TDEC has generally performed annual unannounced inspections of all individual CAFO permits. Part II.A.2 (*Right of Entry*) of the permit ensures that that unannounced inspections can be conducted and sampling would be done, in the event of a discharge.

Comment:

The 24-hour verbal reporting requirement for noncompliance should be changed to 6 hours or less.

Response: In accordance with the permit part II.C.2 the permittee shall make immediate oral notification within 24 hours to the division and notify the division in writing within 5 working days if for any reason a discharge occurs at the CAFO that could cause a threat to public drinking water supplies or human health. The permittee must state the description of the discharge, time and cause of the discharge at time of making oral notification. The division believes that 24 hours is an adequate time to allow the permittee to accurately assess the location and cause of the discharge. The division also believes that 24 hours is appropriate to

allow the permittee to implement an immediate corrective action in order to eliminate the discharge as soon as the discharge is discovered in order to quickly prevent future degradation to the waters of the state and to protect human safety and health.


Any time period beyond 24 hours is in noncompliance.

Comment: Comments were received to correct typographic errors and omissions including transposed latitude and longitude coordinates, correct watershed identification name and number, reference to "navigable waters" and incorrect permit number in the permit and rationale.

Response: All omissions and errors were corrected.

The division's determination is to issue TN0074926 as revised.

Date: 10/28/04


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